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Date of CV revision: 30 March 2017

Citizenship: Indonesian



Position(s) Held

Jul 2016 - Now	Associate Professor School of Information Systems Singapore Management University
Jul 2014 - Sep 2014	Visiting Researcher Microsoft Research Redmond, USA
Jan 2009 - Jun 2016	Assistant Professor School of Information Systems Singapore Management University
May 2008 - Dec 2008	Lecturer School of Information Systems Singapore Management University
Feb 2008 - Apr 2008	Research Intern Microsoft Research India Bangalore, India
Mar 2006 - Nov 2007	Teaching Assistant (Part Time) School of Computing National University of Singapore
Oct 2004 - Feb 2006	Research Assistant School of Computing National University of Singapore Project: A Language-based Approach to Financial Analysis

Research Interests

1. Software Analytics (Code, Execution Trace, Text, Socio-Technical Network)
2. Data Mining - Frequent Pattern Mining, Classification
3. Social Network Mining and Analysis

Awards, Recognition and Honors

1. Outstanding Reviewer Award, Information and Software Technology journal, January 2017
2. Nominated for Best Paper Award, 32nd IEEE International Conference on Software Maintenance and Evolution (ICSME), October 2016

3. Nominated for Best Paper Award, 13th ACM/IEEE International Conference on Mining Software Repositories (MSR), May 2016
4. Nominated for Most Influential Paper Award, 23rd IEEE International Conference on Software Analysis, Evolution and Reengineering (SANER), March 2016
5. Outstanding Reviewer Award, Information and Software Technology journal, January 2016
6. Most Active Reviewer Award, Empirical Software Engineering journal, December 2015
7. ACM SIGSOFT Distinguished Paper Award, 10th Joint Meeting of the European Software Engineering Conference and the ACM SIGSOFT Foundations on Software Engineering (ESEC-FSE), September 2015
8. Nominated for Best Paper Award, 23rd IEEE International Conference on Program Comprehension (ICPC), May 2015
9. Distinguished Reviewer Award, 22nd IEEE International Conference on Software Analysis, Evolution and Reengineering (SANER), March 2015
10. Best Student Paper Award, 19th International Conference on Engineering of Complex Computer Systems (ICECCS), August 2014
11. Most Promising Idea Award, 22nd International Conference on Program Comprehension (ICPC), May 2014
12. Distinguished Reviewer Award, 20th Working Conference on Reverse Engineering (WCRE), October 2013
13. Nominated for Best Paper Awards (2 Papers), 29th IEEE International Conference on Software Maintenance (ICSM), September 2013
14. ACM SIGSOFT Distinguished Paper Award at the 27th IEEE/ACM International Conference on Automated Software Engineering (ASE), September 2012
15. Nominated for SMU Most Promising Teacher Award (1 of 7 nominees), 2012
16. Nominated for SMU Most Promising Teacher Award (1 of 7 nominees), 2011
17. Nominated for Distinguished Paper Award, 18th International Conference on Software Testing and Analysis (ISSTA), July 2009
18. Lee Foundation Fellow for Research Excellence, 2009 - 2010
19. President Graduate Fellowship, National University of Singapore , 2008
20. 2nd Position, ACM SIGPLAN Programming Language Design and Implementation (PLDI) Student Research Competition, 2007
21. President Graduate Fellowship, National University of Singapore, 2007
22. Dean's Graduate Award, National University of Singapore, School of Computing, 2007
23. Dean's List, Nanyang Technological University, School of Computer Engineering , 2004

Education

Jan 2005 - Oct 2008	Doctor of Philosophy Computer Science National University of Singapore
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	Thesis: Specification Mining: Theories, Methodologies, and Applications
Jul 2000 - Jul 2004	Bachelor of Engineering (Hons I) Computer Engineering Nanyang Technological University Thesis: Library of Biological Sequence Matching and Gene Parsing Routines

Thesis Student (Ph. D)

1. Lucia (Graduated)
Role: Supervisor, July 2009 - July 2014
2. Shaowei Wang (Graduated)
Role: Supervisor, July 2010 - July 2015
3. Yuan Tian
Role: Supervisor, August 2012 - July 2017
4. Tien-Duy B. Le
Role: Supervisor, August 2012 - July 2017
5. Pavneet Singh Kochhar
Role: Supervisor, August 2012 - July 2017
6. Ferdian Thung
Role: Supervisor, August 2013 - July 2018
7. Ma Siqi
Role: Co-Supervisor (with Robert H. Deng), August 2013 - July 2018
8. Xuan Bach Le Dinh
Role: Supervisor, January 2014 - December 2018
9. Abhishek Sharma
Role: Supervisor, August 2014 - July 2019
10. Agus Sulistya
Role: Supervisor, August 2014 - July 2019
11. Duc-Thong V. Hoang
Role: Supervisor, August 2016 - July 2021
12. Gede Artha Azriadi Prana
Role: Supervisor, January 2017 - December 2021

Invited Talks

1. Automated Bug Localization and Repair, Invited Talk, 6th International Symposium on High Confidence Software, December 2016
2. History Driven Program Repair, Invited Talk, 5th Asian Workshop of Advanced Software Engineering, March 2016
3. What's New, What Works, & What Doesn't: Personalized Observatory of Software Development Gems and Perils, Invited Talk, Next Generation of Mining Software Repositories, November 2014

4. Data Analytics for Automated Software Engineering, Short Course, 13th Estonian Summer School on Computer and System Science, August 2014
5. Software Analytics: Approaches, Challenges, and Opportunities. Invited Talk, International Summer School on Leading Edge Software Engineering, March 2014
6. To What Extent Could We Detect Field Defects - An Empirical Study of False Negatives in Static Bug Finding Tools. Keynote Talk, Génie Logiciel Empirique Workshop, 2013
7. Mining Execution Traces and Bug Reports: Challenges and Opportunities. Keynote Talk, Workshop on Mining Unstructured Data (MUD), 2010

Conference Proceedings Article

1. "Empirical Study of Usage and Performance of Java Collections", by COSTA, Diego; ANDRZEJAK, Artur; SEBOEK, Janos; LO, David, 04/2017, *Proceedings of the 8th ACM/SPEC International Conference on Performance Engineering*, L'Aquila, Italy. (Forthcoming, Peer-Reviewed)
2. "Mining Sandboxes for Linux Containers", by WAN, Zhiyuan; LO, David; XIA, Xin; CAI, Liang; LI, Shanping, 03/2017, *Proceedings of the 10th IEEE International Conference on Software Testing (ICST 2017)*, Tokyo, Japan. (Forthcoming, Peer-Reviewed)
3. "Detecting similar repositories on GitHub", by ZHANG, Yun; LO, David; KOCHHAR, Pavneet Singh; XIA, Xin; LI, Quanlai; SUN, Jianling, 02/2017, *SANER 2017: Proceedings of 24th IEEE International Conference on Software Analysis, Evolution and Reengineering: Klagenfurt, Austria, February 20-24, 2017, 1 - 10*, Piscataway, NJ: IEEE, <http://doi.org/10.1109/SANER.2017.7884605>. (Published, Peer-Reviewed)
4. "Harnessing Twitter to Support Serendipitous Learning of Developers", by SHARMA, Abhishek; TIAN, Yuan; SULISTYA, Agus; LO, David; YAMASHITA, Aiko, 02/2017, *Proceedings of 24th IEEE International Conference on Software Analysis, Evolution and Reengineering (SANER 2017)*, Klagenfurt, Austria. (Forthcoming, Peer-Reviewed)
5. "CareerMapper: An automated resume evaluation tool", by LAI, Vivian; SHIM, Kyong Jin; OENTARYO, Richard Jayadi; PRASETYO, Philips Kokoh; VU, Casey; LIM, Ee-Peng; LO, David, 12/2016, *BigData 2016: Proceedings of the 4th IEEE International Conference on Big Data: Washington DC, December 5-8, 2016, 4005 - 4007*, Piscataway, NJ: IEEE, <http://doi.org/10.1109/BigData.2016.7841091>. (Published, Peer-Reviewed)
6. "Spiteful, one-off, and kind: Predicting customer feedback behavior on Twitter", by SULISTYA, Agus; SHARMA, Abhishek; LO, David, 11/2016, *Proceedings of 8th International Conference on Social Informatics (SocInfo 2016): Seattle, USA,, 368 - 381*, Seattle, USA: Springer, http://doi.org/10.1007/978-3-319-47874-6_26. (Published, Peer-Reviewed)
7. "What permissions should this android app request?", by BAO, Lingfeng; LO, David; XIA, Xin; LI, Shanping, 11/2016, *SATE 2016: Proceedings of International Conference on Software Analysis, Testing and Evolution: Proceedings: Kunming, November 3-4, 2016*, Piscataway, NJ: IEEE, <http://doi.org/10.1109/SATE.2016.13>. (Published, Peer-Reviewed)
8. "Combining word embedding with information retrieval to recommend similar bug reports", by YANG, Xinli; LO, David; XIA, Xin; BAO, Lingfeng; SUN, Jianling, 10/2016, *ISSRE 2016: Proceedings of the 27th IEEE International Symposium on Software Reliability Engineering: Ottawa, October 23-27, 2016, 127 - 137*, Piscataway, NJ: IEEE, <http://doi.org/10.1109/ISSRE.2016.33>. (Published, Peer-Reviewed)
9. "ORPLocator: Identifying read points of configuration options via static analysis", by DONG, Zhen; ANDRZEJAK, Artur; LO, David; COSTA, Diego, 10/2016, *ISSRE 2016: Proceedings of the*

- 27th IEEE International Symposium on Software Reliability Engineering: Ottawa, October 23-27, 2016*, 185 - 195, Piscataway, NJ: IEEE, <http://doi.org/10.1109/ISSRE.2016.37>. (Published, Peer-Reviewed)
10. "Inferring Links between Concerns and Methods with Multi-Abstraction Vector Space Model", by ZHANG, Yun; LO, David; XIA, Xin; LE, Tien-Duy B.; SCANNIELLO, Giuseppe; SUN, Jianling, 10/2016, *Proceedings of the 32nd IEEE International Conference on Software Maintenance and Evolution (ICSME 2016)*, Raleigh, USA. (Published, Peer-Reviewed)
 11. "Recommending Code Changes for Automatic Backporting of Linux Device Drivers", by THUNG, Ferdian; BACH, Le Dinh Xuan; LO, David; LAWALL, Julia, 10/2016, *Proceedings of the 32nd IEEE International Conference on Software Maintenance and Evolution (ICSME 2016)*, Raleigh, USA. (Published, Peer-Reviewed)
 12. "'Automated Debugging Considered Harmful' Considered Harmful -- A User Study Revisiting the Usefulness of Spectra-Based Fault Localization Techniques with Professionals using Real Bugs from Large Systems", by XIA, Xin; BAO, Lingfeng; LO, David; LI, Shanping, 10/2016, *Proceedings of the 32nd IEEE International Conference on Software Maintenance and Evolution (ICSME 2016)*, Raleigh, USA. (Published, Peer-Reviewed)
 13. "Empirical Study on Synthesis Engines for Semantics-based Program Repair", by BACH, Le Dinh Xuan; LO, David; GOUES, Claire Le, 10/2016, *Proceedings of the 32nd IEEE International Conference on Software Maintenance and Evolution (ICSME 2016)*, Raleigh, USA. (Published, Peer-Reviewed)
 14. "Enhancing Automated Program Repair with Deductive Verification", by BACH, Le Dinh Xuan; LE, Quang Loc; LO, David; GOUES, Claire Le, 10/2016, *Proceedings of the 32nd IEEE International Conference on Software Maintenance and Evolution (ICSME 2016)*, Raleigh, USA. (Published, Peer-Reviewed)
 15. "Predicting Crashing Releases of Mobile Applications", by XIA, Xin; SHIHAB, Emad; KAMEI, Yasutaka; LO, David; WANG, Xinyu, 09/2016, *Proceedings of the 10th ACM/IEEE International Symposium on Empirical Software Engineering and Measurement (ESEM 2016)*, Ciudad Real, Spain. (Published, Peer-Reviewed)
 16. "How Practitioners Perceive the Relevance of ESEM Research", by CARVER, Jeffrey C.; DIESTE, Oscar; KRAFT, Nicholas A.; LO, David; ZIMMERMANN, Thomas, 09/2016, *Proceedings of the 10th ACM/IEEE International Symposium on Empirical Software Engineering and Measurement (ESEM 2016)*, Ciudad Real, Spain. (Published, Peer-Reviewed)
 17. "A Learning-to-Rank Based Fault Localization Approach using Likely Invariants", by LE, Tien-Duy B.; LO, David; LE GOUES, Claire; GRUNSKÉ, Lars, 07/2016, *Proceedings of the 2016 International Conference on Software Testing and Analysis: July 18-20, 2016, Saarbrücken, Germany*, 177 - 188, New York: ACM, <http://doi.org/10.1145/2931037.2931049>. (Published, Peer-Reviewed)
 18. "How Practitioners Perceive Automated Debugging", by KOCHHAR, Pavneet Singh; XIA, Xin; LO, David; LI, Shanping, 07/2016, *Proceedings of the 2016 International Conference on Software Testing and Analysis: July 18-20, 2016, Saarbrücken, Germany*, New York: ACM. (Published, Peer-Reviewed)
 19. "Practitioners' Expectations on Automated Fault Localization", by KOCHHAR, Pavneet Singh; XIA, Xin; LO, David; LI, Shanping, 07/2016, *Proceedings of the 25th ACM International Symposium on Software Testing and Analysis (ISSTA 2016)*, Saarbrücken, Germany. (Published, Peer-Reviewed)
 20. "Condensing Class Diagrams with Minimal Manual Labeling Cost", by YANG, Xinli; LO, David; XIA, Xin; SUN, Jianling, 06/2016, *COMPSAC 2016: Proceedings of the 40th IEEE Annual International Computers, Software and Applications Conference, 10-14 June, Atlanta, Georgia, USA*, Los Alamitos, CA: IEEE Computer Society. (Published, Peer-Reviewed)

21. "Automated Identification of High Impact Bug Reports Leveraging Imbalanced Learning Strategies", by YANG, Xinli; LO, David; HUANG, Qiao; XIA, Xin; SUN, Jianling, 06/2016, *COMPSAC 2016: Proceedings of the 40th IEEE Annual International Computers, Software and Applications Conference, 10-14 June, Atlanta, Georgia, USA*, Los Alamitos, CA: IEEE Computer Society. (Published, Peer-Reviewed)
22. "It Takes Two to Tango: Deleted Stack Overflow Question Prediction with Text and Meta Features", by XIA, Xin; LO, David; CORREA, Denzil; SUREKA, Ashish; SHIHAB, Emad, 06/2016, *COMPSAC 2016: Proceedings of the 40th IEEE Annual International Computers, Software and Applications Conference, 10-14 June, Atlanta, Georgia, USA*, Los Alamitos, CA: IEEE Computer Society. (Published, Peer-Reviewed)
23. "CDRep: Automatic repair of cryptographic-misuses in Android applications", by MA, Siqi; LO, David; LI, Teng; DENG, Robert H., 06/2016, *ASIA CCS '16: Proceedings of the 11th ACM Asia Conference on Computer and Communications Security: May 30 - June 3, Xi'an, China*, 711 - 722, New York: ACM, <http://doi.org/10.1145/2897845.2897896>. (Published, Peer-Reviewed)
24. "Software Analytics: Challenges and Opportunities", by GUERROUJ, Latifa; BAYSAL, Olga; LO, David; KHOMH, Foutse, 05/2016, *2016 ACM/IEEE 38th International Conference on Software Engineering (ICSE): May 14-22, 2016, Austin, TX: Proceedings*, Piscataway, NJ: IEEE. (Published, Peer-Reviewed)
25. "Learning to Rank for Bug Report Assignee Recommendation", by TIAN Yuan; WIJEDASA, Dinusha; LO, David; LE GOUES, Claire, 05/2016, *24th IEEE International Conference on Program Comprehension: ICPC 2016: Proceedings: May 16-17, Austin, Texas*, Piscataway, NJ: IEEE. (Published, Peer-Reviewed)
26. "How Android App Developers Manage Power Consumption? An Empirical Study by Mining Power Management Commits", by BAO, Lingfeng; LO, David; XIA, Xin; WANG, Xinyu; TIAN, Cong, 05/2016, *Proceedings of the 2016 13th International Conference on Mining Software Repositories: May 14-15, Austin, Texas*, Piscataway, NJ: IEEE. (Published, Peer-Reviewed)
27. "A Deeper Look into Bug Fixes: Patterns, Replacements, Deletions, and Additions", by SOTO, Mauricio; THUNG, Ferdian; WONG, Chu-Pan; LE GOUES, Claire; LO, David, 05/2016, *Proceedings of the 2016 13th International Conference on Mining Software Repositories: May 14-15, 2016, Austin, Texas*, Piscataway, NJ: IEEE. (Published, Peer-Reviewed)
28. "Domain-Specific Cross-Language Relevant Question Retrieval", by XU, Bowen; XING, Zhenchang; XIA, Xin; LO, David; WANG, Qingye; LI, Shanping, 05/2016, *Proceedings of the 2016 13th International Conference on Mining Software Repositories: May 14-15, 2016, Austin, Texas*, Piscataway, NJ: IEEE. (Published, Peer-Reviewed)
29. "A Large Scale Study of Multiple Programming Languages and Code Quality", by KOCHHAR; Pavneet S.; WIJEDASA, Dinusha; LO David, 03/2016, *2016 IEEE 23rd International Conference on Software Analysis, Evolution, and Reengineering (SANER): March 16-18, 2016, Osaka: Proceedings*, Piscataway, NJ: IEEE. (Published, Peer-Reviewed)
30. "History Driven Automated Program Repair", by LE, Xuan-Bach D.; LO, David; LE GOUES, Claire, 03/2016, *2016 IEEE 23rd International Conference on Software Analysis, Evolution, and Reengineering (SANER): March 14-18, Osaka: Proceedings*, Piscataway, NJ: IEEE. (Published, Peer-Reviewed)
31. "A More Accurate Model for Finding Tutorial Segments Explaining APIs", by JIANG, He; ZHANG, Jingxuan; LI, Xiaochen; REN, Zhilei; LO, David, 03/2016, *2016 IEEE 23rd International Conference on Software Analysis, Evolution, and Reengineering (SANER): March 14-18, Osaka: Proceedings*, Piscataway, NJ: IEEE. (Published, Peer-Reviewed)
32. "RACK: Automatic API Recommendation using Crowdsourced Knowledge", by RAHMAN, Mohammad M.; ROY, Chanchal K.; LO, David, 03/2016, *2016 IEEE 23rd International*

Conference on Software Analysis, Evolution, and Reengineering (SANER): March 14-18, Osaka: Proceedings, Piscataway, NJ: IEEE. (Published, Peer-Reviewed)

33. "Combining Software Metrics and Text Features for Vulnerable File Prediction", by ZHANG, Yun; LO, David; XIA, Xin; XU, Bowen; SUN, Jianling Sun; LI, Shanping, 12/2015, *20th International Conference on Engineering of Complex Computer Systems (ICECCS 2015)*, 40 - 49, Gold Coast, Australia: IEEE, <http://dx.doi.org/10.1109/ICECCS.2015.15>. (Published, Peer-Reviewed)
34. "CNL: Collective Network Linkage across Heterogeneous Social Platforms", by GAO, Ming; LIM, Ee-Peng; LO, David; ZHU, Feida; PRASETYO, Philips Kokoh; ZHOU, Aoying, 11/2015, *IEEE International Conference on Data Mining ICDM 2015: November 14-17, 2015, Atlantic City: Proceedings*, 757 - 762, Piscataway, NJ: IEEE, <http://dx.doi.org/10.1109/ICDM.2015.34>. (Published, Peer-Reviewed)
35. "Synergizing Specification Miners through Model Fissions and Fusions", by LE, Tien-Duy B.; LE, Xuan-Bach D.; LO, David; BESCHASTNIKH, Ivan, 11/2015, *30th IEEE/ACM International Conference on Automated Software Engineering (ASE 2015)*, 115 - 125, Lincoln, USA, <http://dx.doi.org/10.1109/ASE.2015.83>. (Published, Peer-Reviewed)
36. "An Industrial Experience Report on Test Outsourcing Practices", by XIA, Xin; LO, David; KOCHHAR, Pavneet S.; XING, Zhenchang; WANG, Xinyu; LI, Shanping, 11/2015, *26th IEEE International Symposium on Software Reliability Engineering (ISSRE 2015)*, 370 - 380, Gaithersbury, USA, <http://dx.doi.org/10.1109/ISSRE.2015.7381830>. (Published, Peer-Reviewed)
37. "Should Fixing These Failures be Delegated to Automated Program Repair?", by LE, Xuan-Bach D.; LE, Tien-Duy B. Le; LO, David, 11/2015, *2015 IEEE 26th International Symposium on Software Reliability Engineering (ISSRE): Gaithersburg, MD, November 2-5, 2015*, 427 - 437, Piscataway, NJ: IEEE, <http://dx.doi.org/10.1109/ISSRE.2015.7381836>. (Published, Peer-Reviewed)
38. "Who Should Review This Change? Putting Text and File Location Analyses Together for More Accurate Recommendations", by XIA, Xin; LO, David; WANG, Xinyu; YANG, Xiaohu, 10/2015, *2015 IEEE 31st International Conference on Software Maintenance and Evolution (ICSME): September 29-October 1, 2015, Bremen, Gemany: Proceedings*, 261 - 270, Piscataway, NJ: IEEE, <http://dx.doi.org/10.1109/ICSM.2015.7332472>. (Published, Peer-Reviewed)
39. "What Are the Characteristics of High-Rated Apps? A Case Study on Free Android Applications", by TIAN, Yuan; NAGAPPAN, Meiyappan; LO, David; HASSAN, Ahmed E., 10/2015, *2015 IEEE 31st International Conference on Software Maintenance and Evolution (ICSME): September 29-October 1, 2015, Bremen, Gemany: Proceedings*, 301 - 310, Piscataway, NJ: IEEE, <http://dx.doi.org/10.1109/ICSM.2015.7332476>. (Published, Peer-Reviewed)
40. "Constrained Feature Selection for Localizing Faults", by LE, Tien-Duy B.; LO, David; LI, Ming, 10/2015, *2015 IEEE 31st International Conference on Software Maintenance and Evolution (ICSME): September 29-October 1, 2015, Bremen, Gemany: Proceedings*, 501 - 505, Piscataway, NJ: IEEE, <http://dx.doi.org/10.1109/ICSM.2015.7332502>. (Published, Peer-Reviewed)
41. "What's Hot in Software Engineering Twitter Space?", by SHARMA, Abhishek; TIAN, Yuan; LO, David, 10/2015, *2015 IEEE 31st International Conference on Software Maintenance and Evolution (ICSME): September 29-October 1, 2015, Bremen, Gemany: Proceedings*, 541 - 545, Piscataway, NJ: IEEE, <http://dx.doi.org/10.1109/ICSM.2015.7332510>. (Published, Peer-Reviewed)
42. "How Practitioners Perceive the Relevance of Software Engineering Research", by LO, David; NAGAPPAN, Nachiappan; ZIMMERMANN, Thomas, 09/2015, *10th Joint Meeting of the European Software Engineering Conference and ACM SIGSOFT Symposium on Foundations of Software Engineering (ESEC-FSE 2015)*, 415 - 425, Bergamo, Italy: ACM New York, <http://dx.doi.org/10.1145/2786805.2786809>. (Published, Peer-Reviewed)

43. "Information Retrieval and Spectrum Based Bug Localization: Better Together", by LE, Tien-Duy B.; OENTARYO, Richard J.; LO, David, 09/2015, *10th Joint Meeting of the European Software Engineering Conference and ACM SIGSOFT Symposium on Foundations of Software Engineering (ESEC-FSE 2015)*, 579 - 590, Bergamo, Italy, <http://dx.doi.org/10.1145/2786805.2786880>. (Published, Peer-Reviewed)
44. "Deep Learning for Just-In-Time Defect Prediction", by YANG, Xinli; LO, David; XIA, Xin; ZHANG, Yun; SUN, Jianling, 08/2015, *IEEE International Conference on Software Quality, Reliability, and Security (QRS 2015)*, 17 - 26, Vancouver, Canada, <http://dx.doi.org/10.1109/QRS.2015.14>. (Published, Peer-Reviewed)
45. "An Empirical Study of Bug Fixing Rate", by ZOU, Weiqin; XIA, Xin; ZHANG, Weiqiang; CHEN, Zhenyu; LO, David, 07/2015, *39th Annual International Computers, Software and Applications Conference (COMPSAC 2015)*, 254 - 263, Taichung, Taiwan, <http://dx.doi.org/10.1109/COMPSAC.2015.57>. (Published, Peer-Reviewed)
46. "Active Semi-supervised Approach for Checking App Behavior against its Description", by MA, Siqi; WANG, Shaowei; LO, David; DENG, Robert H.; SUN, Cong, 07/2015, *2015 IEEE 39th Annual Computers Software and Applications Conference (COMPSAC): 1-5 July 2015, Taichung, Taiwan: Proceedings*, 179 - 184, Piscataway, NJ: IEEE, <http://dx.doi.org/10.1109/COMPSAC.2015.93>. (Published, Peer-Reviewed)
47. "An Empirical Study of Classifier Combination on Cross-Project Defect Prediction", by ZHANG, Yun; LO, David; XIA, Xin; SUN, Jianling, 07/2015, *39th Annual International Computers, Software and Applications Conference (COMPSAC 2015)*, 264 - 269, Taichung, Taiwan, <http://dx.doi.org/10.1109/COMPSAC.2015.58>. (Published, Peer-Reviewed)
48. "RCLinker: Automated Linking of Issue Reports and Commits Leveraging Rich Contextual Information", by LE, Tien-Duy B.; VASQUEZ, Mario Linares; LO, David; POSHYVANYK, Denys, 05/2015, *2015 IEEE 23rd International Conference on Program Comprehension (ICPC 2015): Florence, Italy, May 18-19*, 36 - 47, Los Alamitos, CA: IEEE Computer Society, <http://dx.doi.org/10.1109/ICPC.2015.13>. (Published, Peer-Reviewed)
49. "Active Semi-Supervised Defect Categorization", by THUNG, Ferdian; LE Xuan-Bach D.; LO, David, 05/2015, *23rd IEEE International Conference on Program Comprehension (ICPC 2015)*, 60 - 70, Florence, Italy, <http://dx.doi.org/10.1109/ICPC.2015.15>. (Published, Peer-Reviewed)
50. "An Empirical Assessment of Bellon's Clone Benchmark", by CHARPENTIER, Alan; FALLERI, Jean-RÅ©my; LO, David; REVEILLERE, Laurent, 04/2015, *19th International Conference on Evaluation and Assessment in Software Engineering (EASE 2015)*, Nanjing, China: ACM New York, <http://dx.doi.org/10.1145/2745802.2745821>. (Published, Peer-Reviewed)
51. "Understanding Customer Satisfaction Feedback in an IT Outsourcing Company: A Case Study on the Insigma Hengtian Company", by XIA, Xin; LO, David; TANG, Jingfan; LI, Shanping, 04/2015, *19th International Conference on Evaluation and Assessment in Software Engineering (EASE 2015)*, Nanjing, China, <http://dx.doi.org/10.1145/2745802.2745834>. (Published, Peer-Reviewed)
52. "Understanding the Test Automation Culture of App Developers", by KOCHHAR, Pavneet Singh; THUNG, Ferdian.; NAGAPPAN, Nachiappan; ZIMMERMANN, Thomas; LO, David, 04/2015, *ICST 2015 IEEE International Conference on Software Testing, Verification and Validation: 13-17 April 2015, Graz: Proceedings*, 1 - 10, Piscataway, NJ: IEEE, <http://dx.doi.org/10.1109/ICST.2015.7102609>. (Published, Peer-Reviewed)
53. "Evaluating Defect Prediction Using A Massive Set of Metrics", by XUAN, Xiao; LO, David; XIA, Xin; YUAN, Tian, 04/2015, *30th ACM Symposium on Applied Computing (SAC)*, 1644 - 1647, Salamanca, Spain, <http://dx.doi.org/10.1145/2695664.2695959>. (Published, Peer-Reviewed)
54. "Modeling the Evolution of Development Topics Using Dynamic Topic Models", by HU, Jianjun; SUN, Xiaobing; LO, David; LI, Bin, 03/2015, *22nd IEEE International Conference on Software*

- Analysis, Evolution, and Reengineering (SANER)*, 3 - 12, Montreal, Canada, <http://dx.doi.org/10.1109/SANER.2015.7081810>. (Published, Peer-Reviewed)
55. "Query Expansion via Wordnet for Effective Code Search", by LU, Meili; SUN, Xiaobing; WANG, Shaowei; LO, David; DUAN, Yucong, 03/2015, *22nd IEEE International Conference on Software Analysis, Evolution, and Reengineering (SANER)*, 545 - 549, Montreal, Canada, <http://dx.doi.org/10.1109/SANER.2015.7081874>. (Published, Peer-Reviewed)
 56. "Cross-Project Build Co-change Prediction", by XIA, Xin; LO, David; MCINTOSH, Shane; SHIHAB, Emad; HASSAN, Ahmed, 03/2015, *22nd IEEE International Conference on Software Analysis, Evolution, and Reengineering (SANER)*, 311 - 320, Montreal, Canada, <http://dx.doi.org/10.1109/SANER.2015.7081841>. (Published, Peer-Reviewed)
 57. "Beyond Support and Confidence: Exploring Interestingness Measures for Rule-based Specification Mining", by LE, Tien Duy Bui; LO, David, 03/2015, *2015 IEEE 22nd International Conference on Software Analysis, Evolution and Reengineering (SANER): Proceedings: March 2-6, 2015, Montreal, 331 - 340*, Piscataway, NJ: IEEE, <http://dx.doi.org/10.1109/SANER.2015.7081843>. (Published, Peer-Reviewed)
 58. "NIRMAL: Automatic Identification of Software Relevant Tweets Leveraging Language Model", by SHARMA, Abhishek; TIAN, Yuan; LO, David, 03/2015, *2015 IEEE 22nd International Conference on Software Analysis, Evolution, and Reengineering, SANER: Proceedings: March 2-6, 2015, Montreal, 449 - 458*, Piscataway, NJ: IEEE, <http://dx.doi.org/10.1109/SANER.2015.7081855>. (Published, Peer-Reviewed)
 59. "Code Coverage and Test Suite Effectiveness: Empirical Study with Real Bugs in Large Systems", by KOCHHAR, Pavneet Singh; THUNG, Ferdian; LO, David, 03/2015, *22nd IEEE International Conference on Software Analysis, Evolution, and Reengineering (SANER)*, 560 - 564, Montreal, Canada: IEEE, <http://dx.doi.org/10.1109/SANER.2015.7081877>. (Published, Peer-Reviewed)
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Journal Article

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2. "Combined Classifier for Cross-project Defect Prediction: An Extended Empirical Study", by ZHANG, Yun; LO, David; XIA, Xin; SUN, Jianling, 01/2017, *Frontiers of Computer Science (FCS)*. (Forthcoming, Peer-Reviewed)
3. "High Impact Bug Report Detection with Imbalanced Learning Strategies", by YANG, Xinli; LO, David; XIA, Xin; HUANG, Qiao; SUN, Jianling, 01/2017, *Journal of Computer Science and*

Technology. (Forthcoming, Peer-Reviewed)

4. "An Effective Change Recommendation Approach for Supplementary Bug Fixes", by XIA, Xin; LO, David, 01/2017, *Automated Software Engineering*. (Forthcoming, Peer-Reviewed)
5. "Improving Automated Bug Triaging with Specialized Topic Model", by XIA, Xin; LO, David; DING, Ying; AL-KOFAHI, Jafar M.; NGUYEN, Tien N.; WANG, Xinyu, 01/2017, *IEEE Transactions on Software Engineering*. (Forthcoming, Peer-Reviewed)
6. "Will this localization tool be effective for this bug? Mitigating the impact of unreliability of information retrieval based bug localization tools", by LE, Tien-Duy B.; THUNG, Ferdian; LO, David, 01/2017, *Empirical Software Engineering*, 1 - 43, <http://doi.org/10.1007/s10664-016-9484-y>. (Forthcoming, Peer-Reviewed)
7. "On the unreliability of bug severity data", by TIAN, Yuan; ALI, Nasir; LO, David; HASSAN, Ahmed E., 12/2016, *Empirical Software Engineering*, 21, 6, 2298 - 2323, <http://doi.org/10.1007/s10664-015-9409-1>. (Published, Peer-Reviewed)
8. "Collective personalized change classification with multiobjective search", by XIA, Xin; LO, David; WANG, Xinyu; YANG, Xiaohu, 12/2016, *IEEE Transactions on Reliability*, 65, 4, 1810 - 1829, <http://doi.org/10.1109/TR.2016.2588139>. (Published, Peer-Reviewed)
9. "Automated Bug Report Field Reassignment and Refinement Prediction", by XIA, Xin; LO, David; SHIHAB, Emad; WANG, Xinyu, 09/2016, *IEEE Transactions on Reliability*, 65, 3, <http://dx.doi.org/10.1109/TR.2015.2484074>. (Forthcoming, Peer-Reviewed)
10. "AutoQuery: Automatic construction of dependency queries for code search", by WANG, Shaowei; LO, David; JIANG, Lingxiao, 09/2016, *Automated Software Engineering*, 23, 3, 393 - 425, <http://doi.org/10.1007/s10515-014-0170-2>. (Published, Peer-Reviewed)
11. "Code comment quality analysis and improvement recommendation: An automated approach", by SUN, Xiaobing; GENG, Qiang; LO, David; DUAN, Yucong; LIU, Xiangyue; LI Bin, 08/2016, *International Journal of Software Engineering and Knowledge Engineering*, 26, 6, 981 - 1000, <http://doi.org/10.1142/S0218194016500339>. (Published, Peer-Reviewed)
12. "Why and How Developers Fork What from Whom in GitHub", by JIANG, Jing; LO, David; HE, Jiahuan; XIA, Xin; KOCHHAR, Pavneet Singh; ZHANG, Li, 05/2016, *Empirical Software Engineering*. (Accepted, Peer-Reviewed)
13. "Why and How Developers Fork What from Whom in GitHub", by JIANG, Jing; LO, David; HE, Jiahuan; XIA, Xin; KOCHHAR, Pavneet Singh; ZHANG, Li, 05/2016, *Empirical Software Engineering*. (Forthcoming, Peer-Reviewed)
14. "HYDRA: Massively Compositional Model for Cross-Project Defect Prediction", by XIA, Xin; LO, David; PAN, Sinno Jialin; NAGAPPAN, Nachiappan; WANG, Xinyu, 03/2016, *IEEE Transactions on Software Engineering*, 42, 10, <http://doi.ieeecomputersociety.org/10.1109/TSE.2016.2543218>. (Published, Peer-Reviewed)
15. "Diversity maximization speedup for localizing faults in single-fault and multi-fault programs", by XIA, Xin; GONG, Liang; LE, Tien-Duy B.; LO, David; JIANG, Lingxiao; ZHANG, Hongyu, 03/2016, *Automated Software Engineering*, 23, 1, 43 - 75, <http://doi.org/10.1007/s10515-014-0165-z>. (Published, Peer-Reviewed)
16. "AmaLgam+: Composing Rich Information Sources for Accurate Bug Localization", by WANG, Shaowei; LO, David, 01/2016, *Journal of Software: Evolution and Process*. (Published, Peer-Reviewed)
17. "What Security Questions Do Developers Ask? A Large-Scale Study of Stack Overflow Posts", by YANG, Xinli; LO, David; XIA, Xin; WAN, Zhi-Yuan; SUN, Jian-Ling, 01/2016, *Journal of Computer Science and Technology*. (Published, Peer-Reviewed)

18. "Collaborative 'Many to Many' DDoS Detection in Cloud", by MA, Siqi Ma; LO, David; XI, Ning, 01/2016, *International Journal of Ad Hoc and Ubiquitous Computing*. (Published, Peer-Reviewed)
19. "On detecting maximal quasi antagonistic communities in signed graphs", by GAO, Ming; LIM, Ee Peng; LO, David; PRASETYO, Philips Kokoh, 01/2016, *Data Mining and Knowledge Discovery*, 30, 1, 99 - 146, <http://doi.org/10.1007/s10618-015-0405-2>. (Published, Peer-Reviewed)
20. "Automated Prediction of Bug Report Priority using Multi-Factor Analysis", by TIAN, Yuan; LO, David; XIA, Xin; SUN, Chengnian, 10/2015, *Empirical Software Engineering*, 20, 5, 1354 - 1383, <http://dx.doi.org/10.1007/s10664-014-9331-y>. (Published, Peer-Reviewed)
21. "Should I Follow This Fault Localization Tool's Output? Automated Prediction of Fault Localization Effectiveness", by LE, Tien-Duy B.; LO, David; THUNG, Ferdian, 10/2015, *Empirical Software Engineering*, 20, 5, 1237 - 1274, <http://dx.doi.org/10.1007/s10664-014-9349-1>. (Published, Peer-Reviewed)
22. "TagCombine: Recommending Tags to Contents in Software Information Sites", by WANG, Xin Yu; XIA, Xin; LO, David, 09/2015, *Journal of Computer Science and Technology*, 30, 5, 1017 - 1035, <http://dx.doi.org/10.1007/s11390-015-1578-2>. (Published, Peer-Reviewed)
23. "Multi-Factor Duplicate Question Detection in Stack Overflow", by ZHANG, Yun; LO, David; XIA, Xin; SUN, Jian Ling, 09/2015, *Journal of Computer Science and Technology*, 30, 5, 981 - 997, <http://dx.doi.org/10.1007/s11390-015-1576-4>. (Published, Peer-Reviewed)
24. "On the Usefulness of Ownership Metrics in Open-source Software Projects", by FOUCAULT, Matthieu; TEYTON, Cédric; LO, David; BLANC, Xavier.; FALLERI, Jean-Rémy, 08/2015, *Information and Software Technology*, 64, 102 - 112, <http://dx.doi.org/10.1016/j.infsof.2015.01.013>. (Published, Peer-Reviewed)
25. "ELBlocker: Predicting blocking bugs with ensemble imbalance learning", by XIA, Xin; LO, David; SHIHAB, Emad; WANG, Xinyu; YANG, Xiaohu, 05/2015, *Information and Software Technology*, 61, 93 - 106, <http://doi.org/10.1016/j.infsof.2014.12.006>. (Published, Peer-Reviewed)
26. "Dual Analysis for Recommending Developers to Resolve Bugs", by XIA, Xin; LO, David; WANG, Xinyu; ZHOU, Bo, 03/2015, *Journal of Software: Evolution and Process*, 27, 3, 195 - 220, <http://dx.doi.org/10.1002/smr.1706>. (Published, Peer-Reviewed)
27. "Automatic, high accuracy prediction of reopened bugs", by Xia, Xin; LO, David; Shihab, Emad; Wang, Xinyu; Zhou, Bo, 01/2015, *Automated Software Engineering*, 22, 1, 75 - 109, <http://dx.doi.org/10.1007/s10515-014-0162-2>. (Published, Peer-Reviewed)
28. "To what extent could we detect field defects? An extended empirical study of false negatives in static bug finding tools", by THUNG, Ferdian; LUCIA; LO, David; JIANG, Lingxiao; RAHMAN, Foyzur; DEVANBU, Premkumar, 09/2014, *Automated Software Engineering*, 22, 4, 561 - 602, <http://doi.org/10.1007/s10515-014-0169-8>. (Published, Peer-Reviewed)
29. "Extended comprehensive study of association measures for fault localization", by LUCIA; LO, David; JIANG, Lingxiao; THUNG, Ferdian; BUDI, Aditya, 02/2014, *Journal of Software: Evolution and Process*, 26, 2, 172 - 219, <http://doi.org/10.1002/smr.1616>. (Published, Peer-Reviewed)
30. "Detecting Click Fraud in Online Advertising: A Data Mining Approach", by OENTARYO, Richard; LIM, Ee Peng; FINEGOLD, Michael; LO, David; ZHU, Feida; PHUA, Clifton; CHEU, Eng-Yeow; YAP, Ghim-Eng; SIM, Kelvin; Nguyen, Minh Nhut; Perera, Kasun; Neupane, Bijay; Faisal, Mustafa; Aung, Zeyar; WOON, Wei Lee; CHEN, Wei; Dhaval Patel, Dhaval; Berrar, Daniel, 01/2014, *Journal of Machine Learning Research*, 15, 99 - 140, <http://jmlr.org/papers/v15/oentaryo14a.html>. (Published, Peer-Reviewed)
31. "Leveraging machine learning and information retrieval techniques in software evolution tasks: Summary of the first MALIR-SE Workshop, at ASE 2013", by Lucia, -; LO, David; Scanniello,

- Giuseppe; Marchetto, Alessandro; Ali, Nasir; McMillan, Collin, 01/2014, *Software Engineering Notes*, 39, 1, 1 - 2, <http://dx.doi.org/10.1145/2557833.2560584>. (Published)
32. "Clustering of search trajectory and its application to parameter tuning", by Lindawati, Linda; LAU, Hoong Chuin; LO, David, 12/2013, *Journal of the Operational Research Society*, 64, 12, 1742 - 1752, <http://doi.org/10.1057/jors.2012.167>. (Published, Peer-Reviewed)
 33. "Mining Indirect Antagonistic Communities from Social Interactions", by ZHANG, Kuan; LO, David; LIM, Ee Peng; Prasetyo, Philips Kokoh, 01/2013, *Knowledge and Information Systems*, 35, 3, 553 - 583, <http://dx.doi.org/10.1007/s10115-012-0519-4>. (Published, Peer-Reviewed)
 34. "Mining Direct Antagonistic Communities in Signed Social Networks", by LO, David; Surian, Didi; Prasetyo, Philips Kokoh; Kuan, ZHANG; LIM, Ee Peng, 01/2013, *Information Processing and Management*, 49, 4, 773–791 - 791, <http://dx.doi.org/10.1016/j.ipm.2012.12.009>. (Published, Peer-Reviewed)
 35. "Mining Quantified Temporal Rules: Formalism, Algorithms, and Evaluation", by LO, David; Ramalingam, Ganesan; Ranganath, Venkatesh Prasad; Vaswani, Kapil, 06/2012, *Science of Computer Programming*, 77, 6, 743 - 759, <http://dx.doi.org/10.1016/j.scico.2010.10.003>. (Published, Peer-Reviewed)
 36. "Learning Extended FSA from Software: An Empirical Assessment", by LO, David; Mariani, Leonardo; Santoro, Mauro, 01/2012, *Journal of Systems and Software*, 85, 9, 2063 - 2076, <http://dx.doi.org/10.1016/j.jss.2012.04.001>. (Published, Peer-Reviewed)
 37. "Scenario-Based and Value-Based Specification Mining: Better Together", by LO, David; MAOZ, Shahar, 01/2012, *Automated Software Engineering*, 19, 4, 423 - 458, <http://dx.doi.org/10.1007/s10515-012-0103-x>. (Published, Peer-Reviewed)
 38. "Mining Iterative Generators and Representative Rules for Software Specification Discovery", by LO, David; LI, Jinyan; Wong, Limsoon; Khoo, Siau-Cheng, 02/2011, *IEEE Transactions on Knowledge and Data Engineering*, 23, 2, 282 - 296, <http://dx.doi.org/10.1109/TKDE.2010.24>. (Published, Peer-Reviewed)
 39. "Data Mining for Software Engineering", by Xie, Tao; Thummalapenta, Suresh; LO, David; LIU, Chao, 08/2009, *Computer*, 42, 8, 55 - 62, <http://dx.doi.org/10.1109/MC.2009.256>. (Published, Peer-Reviewed)
 40. "Non-Redundant Sequential Rules, Theory and Algorithm", by LO, David; Khoo, Siau-Cheng; Wong, Limsoon, 06/2009, *Information Systems*, 34, 4/5, 438 - 453, <http://doi.ieeecomputersociety.org/10.1016/j.is.2009.01.002>. (Published, Peer-Reviewed)
 41. "Mining temporal rules for software maintenance", by LO, David; Khoo, Siau-Cheng; LIU, Chao, 07/2008, *Journal of Software Maintenance and Evolution*, 20, 4, 227 - 247, <http://dx.doi.org/10.1002/smr.375>. (Published, Peer-Reviewed)

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1. "Improving Software Quality and Productivity Leveraging Mining Techniques: [Summary of the Second Workshop on Software Mining, at ASE 2013]", by LI, Ming; ZHANG, Hongyu; LO David; -, Lucia, 01/2015, *Software Engineering Notes*, 40, 1, 1 - 2, <http://dx.doi.org/10.1145/2693208.2693219>. (Published)

Chapter in Book

1. "Scalable parallelization of specification mining using distributed computing", by WANG, Shaowei; LO, David; JIANG, Lingxiao; MAOZ, Shahar; BUDI, Aditya, 09/2015, In C. Bird; T. Menzie; T. Zimmermann, *The art and science of analyzing software data*, 623 - 648, Amsterdam: Elsevier, <http://doi.org/10.1016/B978-0-12-411519-4.00021-5>. (Published, Peer-Reviewed)
2. "Leveraging Web 2.0 for Software Evolution", by TIAN, Yuan; LO, David, 01/2014, In Mens, Tom; Serebrenik, Alexander; Cleve, Anthony, *Evolving Software Systems*, 163 - 197, New York: Springer Verlag, http://dx.doi.org/10.1007/978-3-642-45398-4_6. (Published, Peer-Reviewed)
3. "Specification Mining: A Concise Introduction", by LO, David; KHOO, Siau-Cheng; LIU, Chao; HAN, Jiawei, 05/2011, In Lo, David; Khoo, Siau-Cheng; Han, Jiawei; Liu, Chao, *Mining Software Specifications: Methodologies and Applications*, Boca Raton, FL: CRC Press, <http://worldcat.org/isbn/978-1439806265>. (Published)
4. "Mining Past-Time Temporal Rules: A Dynamic Analysis Approach", by LO, David; KHOO, Siau-Cheng; LIU, Chao, 01/2009, In *Artificial Intelligence Applications for Improved Software Engineering Development: New Prospects*, 259 - 277, Hershey, PA: Information Science Reference, <http://worldcat.org/isbn/9781605667584>. (Published)

Edited Book

1. "Mining Software Specifications: Methodologies and Applications", by LO, David; KHOO, Siau-Cheng; LIU, Chao; HAN, Jiawei, 05/2011, Boca Raton, FL: CRC Press, <http://worldcat.org/isbn/9781439806265>. (Published, Peer-Reviewed)

Edited Conference Proceedings

1. "31st IEEE/ACM International Conference on Automated Software Engineering (ASE 2016)", by LO, David; APEL, Sven Apel; KHURSHID, Sarfraz, 09/2016, Singapore. (Published, Peer-Reviewed)
2. "15th IEEE International Working Conference on Source Code Analysis and Manipulation", by GODFREY, Michael W.; LO, David; KHOMH, Foutse, 09/2015, Bremen, Germany: IEEE, <http://ieeexplore.ieee.org/xpl/mostRecentIssue.jsp?punumber=7321933>. (Published, Peer-Reviewed)
3. "3rd International Workshop on Software Mining", by LI, Ming; ZHANG, Hongyu; LO, David, 12/2014, Piscataway, NJ: IEEE. (Published)
4. "2nd International Workshop on Software Mining", by LI, Ming; ZHANG, Hongyu; LO, David, 01/2014, CA, United States: ACM. (Published)

Encyclopedia Entry

1. "Collaboration Patterns in Software Developer Network", by SURIAN, Didi; LO, David; LIM, Ee Peng, 10/2014, In Alhadj, Reda; Rokne, Jon, *Encyclopedia of Social Network Analysis and Mining*, 118 - 124, New York: Springer Verlag, http://dx.doi.org/10.1007/978-1-4614-6170-8_292. (Published, Peer-Reviewed)
2. "Mining Software Specifications", by LO, David; KHOO, Siau-Cheng, 01/2009, In Wang, John, *Encyclopedia of Data Warehousing and Mining*, 1301, Hershey, PA: Information Science Reference. (Published, Peer-Reviewed)

Patent

1. "Abstracting events for data mining", by LO, David; RAMALINGAM, Ganesan; RANGANATH, Venkatesh-Prasad; VASWANI, Kapil, 04/2011, US20110087700 A1 / US 12/578603. (Published)

Thesis

1. David Lo. Specification Mining: Methodologies, Theories and Applications. PhD Dissertation, National University of Singapore, November 2008
2. David Lo. Library of Biological Sequence Matching and Gene Parsing Routines. Final Year Project Report, Nanyang Technological University, May 2004

Professional Activities

1. Program Board, 40th ACM/IEEE International Conference on Software Engineering (ICSE 2018), 2018
2. Tool Demo Co-Chair, 32nd IEEE/ACM International Conference on Automated Software Engineering (ASE 2017), 2017
3. PC Member, 23rd ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (KDD 2017), 26th International Joint Conference on Artificial Intelligence (IJCAI 2017), 8th International Workshop on Empirical Software Engineering in Practice (IWESEP 2017), 32nd IEEE/ACM International Conference on Automated Software Engineering (ASE 2017), 33rd IEEE International Conference on Software Maintenance and Evolution (ICSME 2017), 14th ACM/IEEE International Conference on Mining Software Repositories (MSR 2017), 21st International Conference on Evaluation and Assessment in Software Engineering (EASE 2017) [Short Papers Track], IEEE International Symposium on Visual Languages and Human-Centric Computing (VL/HCC 2017), 24th IEEE International Conference on Software Analysis, Evolution, and Reengineering (SANER 2017), 39th ACM/IEEE International Conference on Software Engineering (ICSE 2017) [Workshop Track], 32nd ACM Symposium on Applied Computing (SAC 2017) [Software Engineering Track], International Conference on Platform Technology and Services (PlatCon 2017), and IEEE International Conference on Software Quality, Reliability, and Security (QRS 2017), 2017
4. PC Co-Chair, 25th IEEE International Conference on Program Comprehension (ICPC 2017), 2017
5. Local Arrangement Co-Chair, 26th ACM International Conference on Information and Knowledge Management (CIKM 2017), 2017
6. Editorial Board Member, Journal of Software: Evolution and Process, 2017
7. Editorial Board Member, Information and Software Technology Journal, 2017
8. Doctoral Symposium Co-Chair, 33rd IEEE International Conference on Software Maintenance and Evolution (ICSME 2017), 2017
9. Technology Briefings Co-Chair, 32nd IEEE International Conference on Software Maintenance and Evolution (ICSME 2016), 2016
10. Steering Committee Member, IEEE/ACM International Conference on Automated Software Engineering (ASE), 2016
11. Short Paper Track Co-Chair, 24th IEEE International Conference on Program Comprehension (ICPC 2016), 2016

12. Publicity Co-Chair, 23rd IEEE International Conference on Software Analysis, Evolution and Reengineering (SANER 2016), 2016
13. PC Member, 38th ACM/IEEE International Conference on Software Engineering (ICSE 2016), 7th International Workshop on Empirical Software Engineering in Practice (IWESEP 2016), 31st ACM Symposium on Applied Computing (SAC 2016) [Software Engineering Track], 22nd ACM SIGKDD Conference on Knowledge Discovery and Data Mining (KDD 2016), 16th SIAM International Conference on Data Mining (SDM 2016), 13th IEEE/ACM Working Conference on Mining Software Repositories (MSR 2016), 23rd IEEE International Conference on Software Analysis, Evolution and Reengineering (SANER 2016) [Main Track, ERA Track, Industry Track], 32nd IEEE International Conference on Software Evolution and Maintenance (ICSME 2016) [ERA Track, Artifacts Track], 24th ACM SIGSOFT International Symposium on Foundations of Software Engineering (FSE 2016) [Artifacts Track], 23rd Asia-Pacific Software Engineering Conference (APSEC 2016), 21st International Conference on Engineering of Complex Computer Systems (ICECCS 2016), Annual Conference on Software Analysis, Testing and Evolution (SATE 2016), ACM Student Research Competition Grand Finals, 10th ACM/IEEE International Symposium on Empirical Software Engineering and Measurement (ESEM 2016) [Industry Track], and IEEE International Conference on Software Quality, Reliability and Security (QRS 2016), 2016
14. General Chair, 31st IEEE/ACM International Conference on Automated Software Engineering (ASE 2016), 2016
15. Editorial Board Member, Information Systems, 2016
16. Workshop Co-Chair, 30th IEEE/ACM International Conference on Automated Software Engineering (ASE 2015), 2015
17. Steering Committee Member, IEEE Working Conference on Source Code Analysis and Manipulation (for 3 years), 2015
18. PC Member, 9th International Symposium on Empirical Software Engineering and Measurement (ESEM 2015) [Industry Track], 2015
19. PC Member, 5th Workshop on Mining Unstructured Data (MUD 2015), 2015
20. PC Member, 37th ACM/IEEE International Conference on Software Engineering (ICSE 2015), 2015
21. PC Member, 31st IEEE International Conference on Software Maintenance and Evolution (ICSME) [Main Track, ERA Track], 2015
22. PC Member, 30th IEEE/ACM International Conference on Automated Software Engineering (ASE 2015), 2015
23. PC Member, 30th ACM Symposium on Applied Computing (SAC 2015) [Software Engineering Track], 2015
24. PC Member, 23rd IEEE International Conference on Program Comprehension (ICPC 2015), 2015
25. PC Member, 22nd International Conference on Software Analysis, Evolution and Reengineering (SANER 2015) [Main Track, Tool Track], 2015
26. PC Member, 22nd Asia-Pacific Software Engineering Conference (APSEC 2015), 2015
27. PC Member, 21st ACM SIGKDD Conference on Knowledge Discovery and Data Mining (KDD 2015), 2015

28. PC Member, 20th International Conference on Engineering of Complex Computer Systems (ICECCS 2015), 2015
29. PC Member, 19th Pacific-Asia Conference on Knowledge Discovery and Data Mining (PAKDD 2015), 2015
30. PC Member, 12th IEEE/ACM Working Conference on Mining Software Repositories (MSR 2015) [Data Track], 2015
31. PC Co-Chair, 15th IEEE Working Conference on Source Code Analysis and Manipulation, 2015
32. Editorial Board Member, Empirical Software Engineering Journal, 2015
33. Steering Committee Member, IEEE International Conference on Software Analysis, Evolution and Reengineering (SANER) (for 3 years), 2014
34. PC Member, Workshop on Data Analysis Patterns in Software Engineering (DAPSE 2014), 2014
35. PC Member, Joint Meeting of the 18th European Conference on Software Maintenance and Reengineering (CSMR 2014) and the 21st Working Conference on Reverse Engineering (WCRE 2014) [Main track, Project track], 2014
36. PC Member, 3rd ETAPS Workshop on Graph Inspection and Traversal Engineering (GRAPHITE 2014), 2014
37. PC Member, 37th ACM/IEEE International Conference on Software Engineering (ICSE 2014) [Mentoring], 2014
38. PC Member, 30th IEEE International Conference on Software Maintenance and Evolution (ICSME 2014), 2014
39. PC Member, 29th IEEE/ACM International Conference on Automated Software Engineering (ASE 2014), 2014
40. PC Member, 22nd International Conference on Program Comprehension (ICPC 2014), 2014
41. PC Member, 22nd ACM SIGSOFT Symposium on Foundations on Software Engineering (FSE 2014) [SRC Track], 2014
42. PC Member, 20th ACM SIGKDD Conference on Knowledge Discovery and Data Mining (KDD 2014), 2014
43. PC Member, 19th International Conference on Engineering Complex Computer System (ICECCS 2014), 2014
44. PC Member, 18th Pacific/Asia Conference on Knowledge Discovery and Data Mining (PAKDD 2014), 2014
45. PC Member, 14th SIAM International Conference on Data Mining (SDM 2014), 2014
46. PC Member, 11th Working Conference on Mining Software Repository (MSR 2014), 2014
47. Editorial Board Member, Neurocomputing Journal (Software Section), 2014
48. Workshop and Tutorial Co-Chair, 28th IEEE/ACM International Conference on Automated Software Engineering (ASE 2013), 2013
49. PC Member, 30th IEEE International Conference on Software Maintenance and Evolution (ICSM 2013), 2013

50. PC Member, 28th IEEE/ACM International Conference on Automated Software Engineering (ASE 2013), 2013
51. PC Member, 20th Working Conference on Reverse Engineering (WCRE 2013), 2013
52. PC Member, 1st Workshop on Natural Language Analysis in Software Engineering (NaturaLiSE 2013), 2013
53. PC Member, 19th ACM SIGKDD Conference on Knowledge Discovery and Data Mining (KDD 2013), 2013
54. PC Member, 17th Pacific/Asia Conference on Knowledge Discovery and Data Mining (PAKDD 2013), 2013
55. PC Member, 13th IEEE Working Conference on Source Code Analysis and Manipulation (SCAM) 2013 [Tool track], 2013
56. PC Member, 10th Working Conference on Mining Software Repository (MSR 2013), 2013
57. 21st International Conference on Program Comprehension (ICPC 2013) [Main track, ERA track], 2013
58. Tool Demo Co-Chair, 19th Working Conference on Reverse Engineering (WCRE 2012) , 2012
59. Sponsorship Chair, 4th Asian Conference on Machine Learning (ACML 2012), 2012
60. PC Member, 9th International Conference on Mining Software Repository (MSR 2012), 2012
61. PC Member, 34th International Conference on Software Engineering (ICSE 2012) [Informal Demo and Poster Track], 2012
62. PC Member, 28th International Conference on Software Maintenance (ICSM 2012) [ERA Track], 2012
63. PC Member, 27th IEEE/ACM International Conference on Automated Software Engineering (ASE 2012), 2012
64. PC Member, 16th Pacific-Asia Conference on Knowledge Discovery and Data Mining (PAKDD 2012), 2012
65. Co-Chair, 1st International Workshop on Software Mining (SoftMine 2012), co-located with 18th ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (KDD 2012), 2012
66. Sponsorship/Exhibition Co-Chair, 3rd International Conference on Social Informatics (SocInfo 2011), 2011
67. PC Member, 9th International Workshop on Dynamic Analysis (WODA 2011), 2011
68. PC Member, 8th International Conference on Mining Software Repository (MSR 2011), 2011
69. PC Member, 27th International Conference on Software Maintenance (ICSM 2011) [ERA Track], 2011
70. PC Member, 26th IEEE/ACM International Conference on Automated Software Engineering (ASE 2011), 2011
71. PC Member, 18th IEEE Working Conference on Reverse Engineering (WCRE 2011), 2011

72. PC Member, 17th ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (KDD 2011) [Industry Track], 2011
73. PC Member, ACM 16th SIGKDD International Conference on Knowledge Discovery and Data Mining (KDD 2010), 2010
74. PC Member, 21st IEEE International Symposium on Software Reliability Engineering (ISSRE 2010) [Poster Track], 2010
75. Reviewer of a number of journal paper submissions for: TSE, TOSEM, JSS, ASE J., TKDE, VLDB J., etc., 2009 - Now

Courses Taught - Professional

1. Software Mining and Analysis, National Institute of Technology Karnataka (NITK), India. Part of Government of India's Global Initiative of Academic Networks (GIAN) program, October 2016

Courses Taught - Ph. D

1. IS706 Software Mining and Analysis, January 2016 - May 2016
2. IS706 Software Mining and Analysis, January 2014 - May 2014
3. IS706 Software Mining and Analysis, January 2013 - April 2013
4. IS706 Engineering Software Systems, January 2012 - April 2012
5. IS706 Engineering Software Systems, January 2011 - April 2011
6. IS706 Engineering Software Systems, January 2010 - April 2010

Courses Taught - Undergraduate

1. IS201 Object Oriented Application Development, January 2017 - May 2017
2. IS480 Information System Application Project, August 2016 - December 2016
3. IS201 Object Oriented Application Development, January 2016 - May 2016
4. IS201 Object Oriented Application Development, January 2015 - May 2015
5. IS480 Information System Application Project, January 2015 - May 2015
6. IS201 Object Oriented Application Development, January 2014 - May 2014
7. IS480 Information System Application Project, January 2014 - May 2014
8. IS201 Object Oriented Application Development, January 2013 - April 2013
9. IS201 Object Oriented Application Development, January 2012 - April 2012
10. IS201 Object Oriented Application Development, January 2011 - April 2011
11. IS201 Object Oriented Application Development, January 2010 - April 2010
12. IS201 Object Oriented Application Development, January 2009 - April 2009

13. IS203 Software Engineering, August 2008 - December 2008

Teaching Assistance and Tutoring

1. CS3215 - Software Engineering Project
National University of Singapore, January 2007 - April 2007
2. CS3215 - Software Engineering Project
National University of Singapore, August 2006 - November 2006
3. CS3215 - Software Engineering Project
National University of Singapore, January 2006 - April 2006
4. CS3215 - Software Engineering Project
National University of Singapore, August 2005 - November 2005